

PM SERIES POWERED MIXERS: PM500 SYSTEM PM600 SYSTEM





WARNING: DUE TO THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

Wharfedale Professional Limited Warranty: The PM Series of Powered Mixers are warranted to be clear of manufacturing or materials defects for a period of one year from the original date of purchase. In the event of malfunction, contact your authorised Wharfedale Professional dealer or distributor. Be aware that warranty details differ from country to country.

Unpacking: All Wharfedale Pro Products are fully checked before leaving the factory. After unpacking please inspect the units for any physical damage. Please retain the shipping carton if possible and internal packing material in case the unit needs to be returned. Please check as soon as possible that the unit is functioning. In the event of any damage please contact your dealer immediately so that a written claim for damages may be made.

!Warning – read all operating and service instructions that accompany this appliance! **!Varning** – läs alla användar- och serviceinstruktioner som medföljer enheten! **!Atenção** - leia todas as instruções de manutenção e de operação que acompanham este aparelho! **!AVVERTENZA** – Leggere attentamente le istruzioni per il funzionamento e la manutenzione fornite con l'unità! **!Aviso:** Lea todas las instrucciones de funcionamiento y de mantenimiento que se adjuntan a este aparato! **Vaara** – lue kaikki laitteen mukana toimitetut käyttö- ja huolto-ohjeet! **!Advarsel** – læs alle betjenings- og serviceanvisninger, der følger med produktet! **!Waarschuwing** – lees alle bedienings- en onderhoudsinstructies die bij dit apparaat horen! **!Vorsicht** - Lesen Sie diese Bedienungsanleitung sorgfältig durch! **!Attention:** Lisez attentivement les instructions avant d'utiliser ce produit!

FORSIKTIGHET: För att minska risken för elstötar bör man inte ta bort enhetens ytterhölje (eller det bakre skyddshöljet). Reparationer får bara genomföras av kvalificerade servicetekniker.

AVISO: Para reduzir o risco de choque eléctrico, não remova a tampa (ou a cobertura traseira). O usuário não deve efectuar a manutenção. Deve pedir aos técnicos qualificados em manutenção.

ATTENZIONE: Per ridurre il rischio di scosse elettriche, non rimuovere la copertura (o il pannello posteriore). Le operazioni di manutenzione devono essere eseguite esclusivamente da personale qualificato.

PRECAUCION: Con el fin de reducir el riesgo de sacudidas eléctricas, no desmonte la tapa (o la tapa posterior). El mantenimiento no deberá ser realizado por el usuario, sino por el personal de mantenimiento cualificado.

WARNING: To reduce the risk of electric shock, do not remove cover (or back). No user servicing to qualified service personnel.

VAROITUS: Tulipalo- ja sähköiskuvaaran vähentämiseksi älä irrota suojusta (tai takapaneelia). Älä huolla laitetta itse, anna huoltotyöt ammattitaitoisen huoltohenkilökunnan tehtäväksi.

FORSIGTIG: For at mindske risikoen for elektrisk stød må du ikke fjerne beklædningen (eller bagbeklædningen). Reparationer må kun udføres af kvalificeret servicepersonale.

PAS OP: Om de kans op elektrische schokken te minimaliseren, dient u de afdekklep (of achterkant) niet te verwijderen. Onderhoud dient alleen te worden uitgevoerd door gekwalificeerd personeel.

VORSICHT: Um die Gefahr eines elektrischen Schlages zu vermeiden darf die Abdeckung nicht entfernt werden. Die Wartung des Gerätes sollte qualifiziertem Fachpersonal vorbehalten bleiben.

CAUTION: Pour réduire les risques d'électrocution, ne pas démonter le capot. La manipulation doit être effectuée par un personnel agréé.

WHARFEDALE PROFESSIONAL PM SERIES POWERED MIXERS

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WHARFEDALE PROFESSIONAL PM SERIES POWERED MIXERS

INTRODUCTION:

Congratulations on the purchase of your PM System from Wharfedale Professional. The PM System is available in a choice of two versions - the PM 500 and the PM 600. The PM500 System comprises 1 x PM 500 powered mixer, two PT10 two way 10" loudspeakers and one DM1.0 dynamic microphone (plus one mic cable and two speaker cables). The PM600 System comprises 1 x PM600 powered mixer, two PT12 two way 12" loudspeakers and one DM1.0 dynamic microphone (plus one mic cable and two speaker cables).

In order to get the most satisfaction from your PM System, please read this manual carefully.

GETTING STARTED:

1. Before you turn on the main power to the unit, ensure that the Master Output Control is in the OFF position.
2. If you need to connect or disconnect any cables or units, make sure the Power is OFF before doing so.
3. Check that the voltage of the unit matches the AC voltage you will be operating with.

FEATURES OF THE PM POWERED MIXER SECTION OF YOUR SYSTEM:

FEATURES:

PM600

- Five Mic and six line input sockets
- Channel six features extra Tape In button
- Digital Delay Section
- Three Band EQ in Master Section
- Tape In
- Record Out
- EFX Return
- EFX Send
- Power On/Off on front of unit for ease of use
- Parallel speaker outputs on rear of unit
- Main line output on rear of unit
- Built in 230 watt power amplifier
- Two band channel EQ
- XLR plus 1/4" input sockets
- Fan cooling system
- Thermal protection

PM500

- Four Mic and five Line input sockets
- Channel five features Tape In Button
- Main line output on rear of unit
- Two band Channel EQ
- XLR plus 1/4" input sockets
- Digital Delay Section
- Record Out
- Built in 120 watt power amplifier
- Thermal protection

FEATURES OF THE PT LOUDSPEAKER SECTION OF YOUR SYSTEM:

An integral part of the PM Systems are the PT loudspeakers. The PM500 comes with a pair of PT10 loudspeakers whilst the PM600 comes with a pair of PT12 loudspeakers. The PT series are high output, high efficiency loudspeakers featuring Wharfedale Pro proprietary drive unit and a purpose built high quality Electro-Dynamic high frequency driver. With built in high frequency driver overload protection, the PT series are perfect for life on the road. The PT Series are built using a tough steel grille and tough road tested carpet. Each loudspeaker has a pole mount top hat for use with poles or tripods. 60° x 90° radial horn featuring Wharfedale Pro proprietary components.

CHECK YOU HAVE ALL THE COMPONENTS OF YOUR SYSTEM:

Please check that you have the components listed below before setting up your PM System.

PM500 System:

- 1 PM500 Powered Mixer
- 1 Pair Wharfedale PT10 loudspeakers
- 2 cables (mixer to loudspeaker 1/4" jack)
- 1 Wharfedale DM1.0 Microphone with lead

PM600 System:

- 1 PM600 Powered Mixer
- 1 Pair Wharfedale PT12 loudspeakers
- 2 cables (mixer to loudspeaker 1/4" jack)
- 1 Wharfedale DM1.0 Microphone with lead

WHARFEDALE PROFESSIONAL PM SERIES POWERED MIXERS

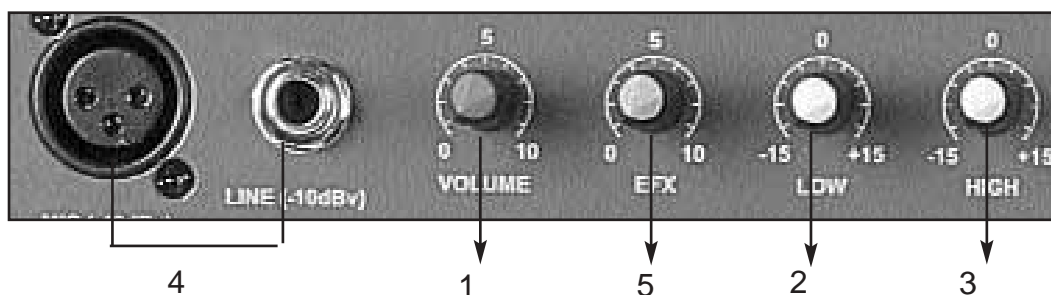
CHANNEL STRIP DESCRIPTION PM500:



1. **VOLUME:** Determines volume level of the channel in the mix.
2. **LOW EQ:** The LOW EQ control gives 15db of boost or cut at 80Hz. By turning the knob to the right (boost) instruments such as guitars can be given more clarity, or vocals can be 'warmed'. Turning to the left (cut) will eliminate unwanted low frequencies such as those caused by close miking or excessive bass frequencies in instruments
3. **HIGH EQ:** The High EQ control gives 15dB boost or cut at 12kHz. Turn to the right to add clarity to high frequency components such as percussion. By turning to the left, high frequencies such as 'hiss' are cut.
4. **MIC/LINE INPUT:** Connection can be made to the MIC/LINE inputs with either XLR or 1/4" phono jack. This connection can be either a microphone or a line level signal.
5. **EFX:** Use this control to determine the signal level to be sent to the built in digital delay effect control.

The LF control frequency has been carefully selected, allowing pleasing musical adjustment to vocals or instruments without losing their natural balance. The HF control is similarly designed to enable pleasing musical control without harshness or excessive mid range interference.

CHANNEL STRIP DESCRIPTION PM600:



1. **VOLUME:** Determines volume level of the channel in the mix.
2. **LOW EQ:** The LOW EQ control gives 12db of boost or cut at 100Hz. By turning the knob to the right (boost) instruments such as guitars can be given more clarity, or vocals can be 'warmed'. Turning to the left (cut) will reduce hum or unwanted background interference.
3. **HIGH EQ:** The High EQ control gives 12dB boost or cut at 8kHz. Turn to the right to add clarity to high frequency components such as percussion. By turning to the left, high frequencies such as 'hiss' are cut.
4. **MIC/LINE INPUT:** Connection can be made to the MIC/LINE inputs with either XLR or 1/4" phono jack. This connection can be either a microphone or a line level signal.
5. **EFX:** Use this control to determine the signal level to be sent to the built in digital delay effect control.

WHARFEDALE PROFESSIONAL PM SERIES POWERED MIXERS

MASTER SECTION DESCRIPTION PM500 AND PM600:



PM600

DIGITAL DELAY SECTION:

The built in digital delay will process the signal from the input channels and feed to the master output. The effects of digital delay are controlled by:

TIME: This adjusts the internal time of the delays. Turn to the right to increase the interval time between two delays, turn to the left to decrease.

REPEAT: This increases the repeat rate of the delays by turning the knob to the right.

VOLUME: This knob adjusts the mix level of the effect.



PM500



MASTER CONTROL PM500:

The Master Control adjusts the final level of the Main bus signal which is output to the speakers.

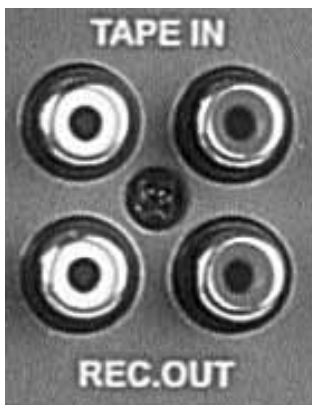


MASTER CONTROL PM600:

The Master Control on the PM600 also offers a three band (MID, LOW and HIGH) EQ section for tonal adjustment of the final mix.

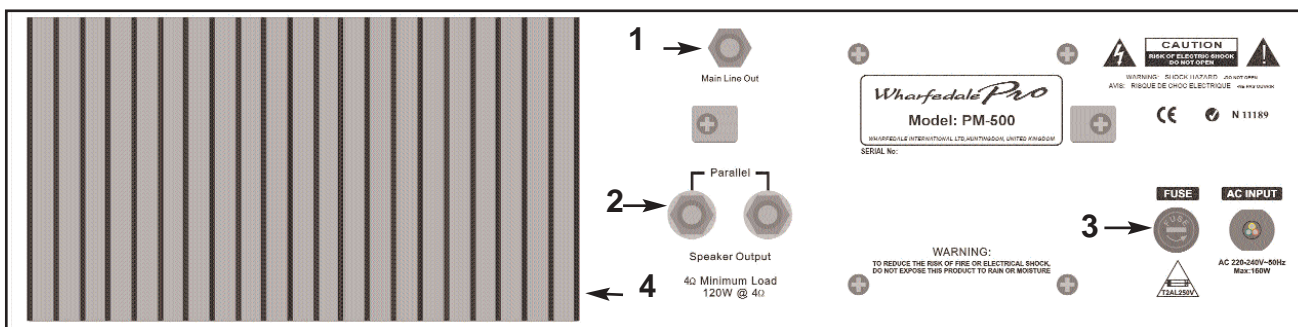
WHARFEDALE PROFESSIONAL PM SERIES POWERED MIXERS

TAPE IN AND REC OUT PM500 AND PM600:



The TAPE IN sockets allow cassette recorders or CD players to be added to the Main output. The RECORD OUTPUT provides a signal output to a cassette deck and home audio equipment. Sockets are RCA Phono.

REAR PANEL DESCRIPTION PM500:



PM500:

1. MAIN LINE OUT: This unbalanced insertion point allows the main output to be sent to an external signal processor or power amplifier. The insert is a 1/4" phono jack socket which is not bypassed.

2. SPEAKER OUTPUT JACKS: These outputs allow two speakers to be connected at the same time to the powered mixer. The total minimum load required is 4 Ohms. If the total load is less than 4 Ohms it may result in the mixer being damaged. The following guidelines should be noted:

When using two speakers at the same time, use 8-16 Ohms speakers.

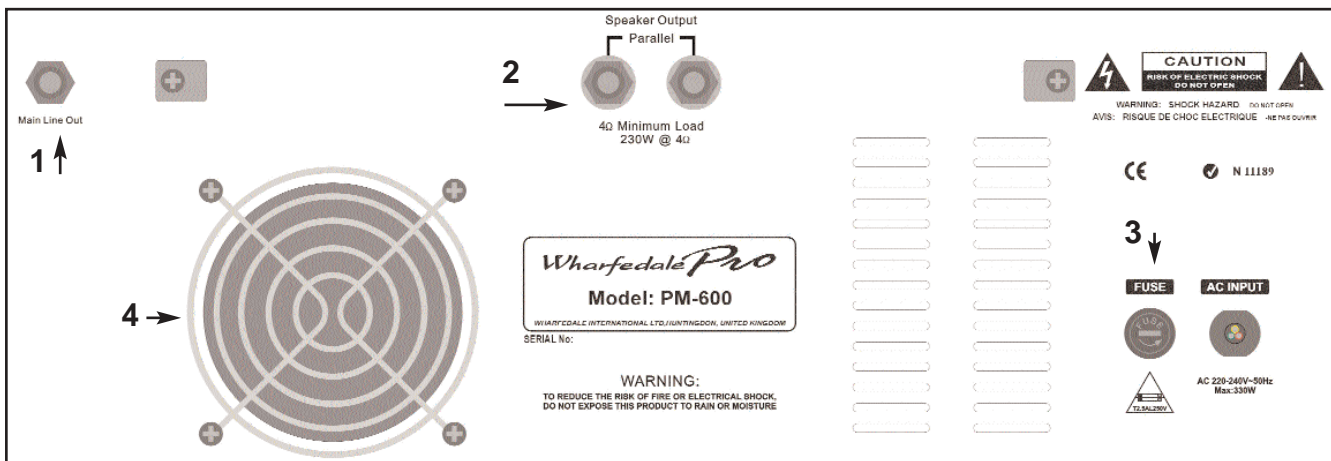
When using one speaker only, use a 4-8 Ohms speaker.

3. FUSE: Always ensure that the fuse is of the correct rating.

4. ALUMINIUM HEATSINK: This allows a cooling airflow through the unit. Make sure that the heatsink is free from dust and there is sufficient room left at the back of the unit to allow the heatsink to work efficiently.

WHARFEDALE PROFESSIONAL PM SERIES POWERED MIXERS

REAR PANEL DESCRIPTION PM600:



PM600:

1. MAIN LINE OUT: This unbalanced insertion point allows the main output to be sent to an external signal processor or power amplifier. The insert is a 1/4" phono jack socket which is normally bypassed.

2. SPEAKER OUTPUT JACKS: These outputs allow two speakers to be connected at the same time to the powered mixer. The total minimum load required is 4 Ohms. If the total load is less than 4 Ohms it may result in the mixer being damaged. The following guidelines should be noted:

When using two speakers at the same time, use 8-16 Ohms speakers.

When using one speaker only, use a 4-8 Ohms speaker.

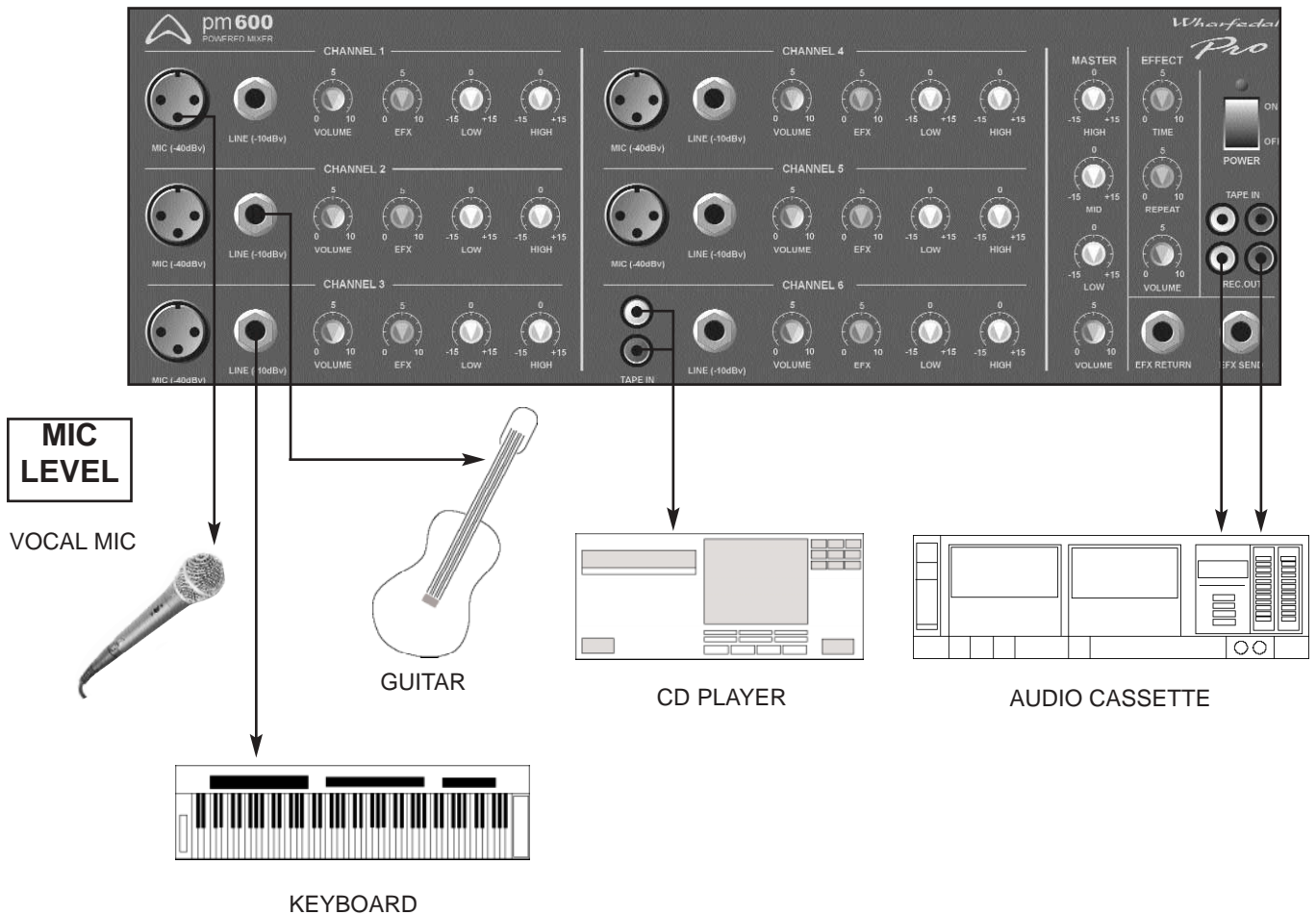
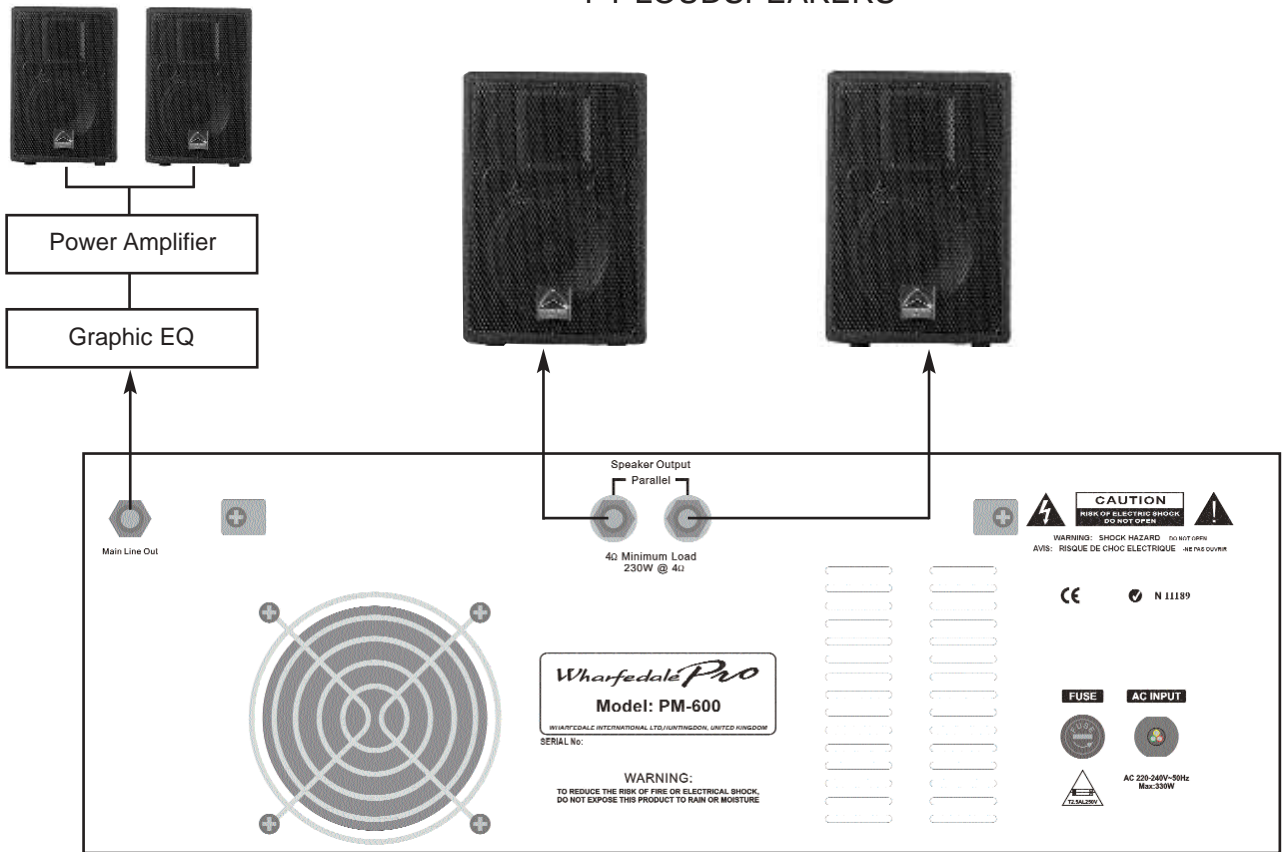
3. FUSE: Always ensure the fuse is of the correct rating.

4. COOLING FAN: This creates a cooling airflow through the unit. Make sure that the fan is free from dust and there is sufficient room left at the back of the unit to allow the fan to work efficiently.

WHARFEDALE PROFESSIONAL PM SERIES POWERED MIXERS

APPLICATIONS: PM600

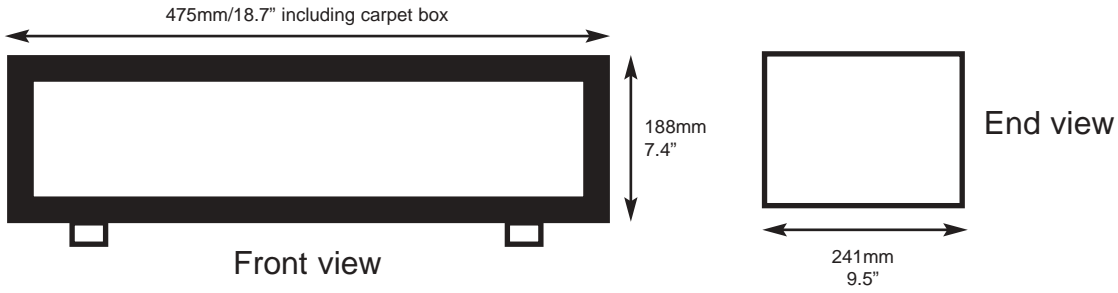
PT LOUDSPEAKERS



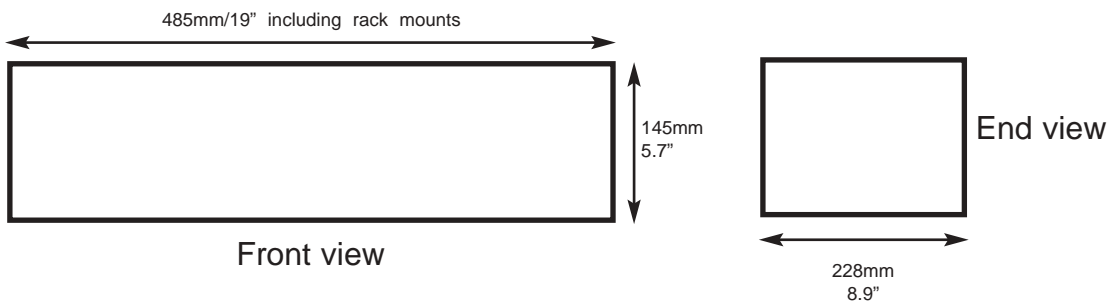
WHARFEDALE PROFESSIONAL PM SERIES POWERED MIXERS

DIMENSIONS:

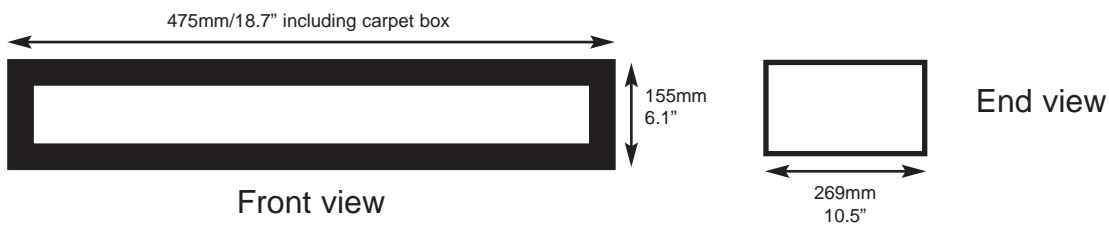
PM600



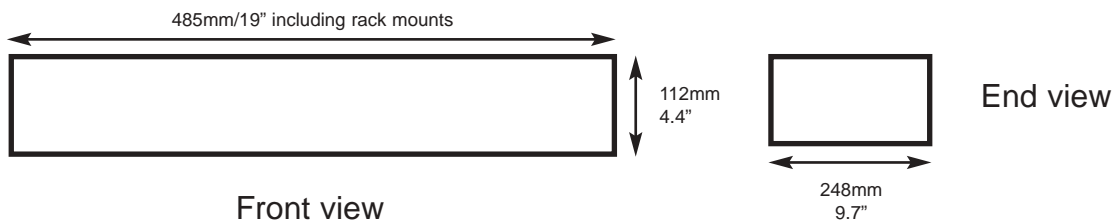
PM600 RM



PM500



PM500 RM



MODEL	PM500 MIXER	PM600 MIXER
POWER AMP - MAX OUTPUT IN WATTS		
4 OHMS	120 WATTS	230 WATTS
INPUTS		
BALANCED MIC	4	5
LINE CHANNELS	5	6
INPUT IMPEDANCE		
LOW Z (BALANCED)	2K/OHMS	2K/OHMS
LINE	16K/OHMS	16K/OHMS
MAIN OUT	UNBAL. TRS	UNBAL. TRS
FREQUENCY RESPONSE (+/-3dB)	20Hz to 25KHz	20Hz to 25KHz
MAXIMUM CHANNEL GAIN		
LOW Z (BALANCED)	40dB	40dB
LINE	20dB	20dB
MAXIMUM INPUT LEVEL		
LOW Z (MIC)	0dB	0dB
LINE	+20dB	+20dB
MAXIMUM OUTPUT LEVEL		
MAIN	+18dBv	+18dBv
RECORD OUT	+5dBv	+5dBv
MASTER EQ		
HI EQ	NA	12KHz±12DB
MID EQ	NA	1KHz±12dB
LOW EQ	NA	80Hz±12dB
CHANNEL EQUALISATION		
LOW EQ	80Hz ± 15dB	100Hz ± 12dB
HI EQ	12KHz±15dB	8KHz±12dB
PROTECTION	THERMAL/LOAD	THERMAL/LOAD
MASTER SECTION		
BUILT IN DIGITAL EFFECT	YES	YES
THD	LESS THAN 0.1%	LESS THAN 0.1%
POWER CONSUMPTION	120 WATTS	230 WATTS
POWER REQUIREMENTS	160 WATTS	330 WATTS
SPEAKER CONNECTORS	1/4" JACK	1/4" JACK
WEIGHT		
PM500	9.32KG/20.5lbs	PM600 11.48KG/24.7lbs
PM500RM	7.6KG/16.7lbs	PM600RM 9.72KG/21.4lbs
DIMENSIONS		
PM500	475MM X 269MM X 155MM	18.7" x 10.5" x 6.1"
PM600	475MM X241MM X 188MM	18.7" x 9.5" x 7.4"
PM500RM	485MMX248MMX112MM	19" X 9.7" X 4.4"
PM600RM	485MMX228MMX145MM	19" X 8.9" X 5.7"

MODEL NAME		PT-10	PT-12
FREQ RESP +/- 6 dB		65Hz-20KHz	50Hz-20KHz
SENSITIVITY 1W@1M		95dB	97dB
NOMINAL COVERAGE HOZ		90°	90°
NOMINAL COVERAGE VERT		60°	60°
INPUT POWER (WATTS)			
CONTINUOUS		110	150
MUSIC		220	300
PEAK		440	600
MAX SPL PEAK		119dB	121dB
NOMINAL IMPEDANCE		8Ω	8Ω
PRODUCT DIMS (MM)	H	499	554
	W	341	398
	D	279	332
SHAPE		TRAP	TRAP
WEIGHT KG (NET)		11 KG	13.5 KG
WEIGHT LBS (NET)		24.2 LBS	29.7 LBS
L F DRIVER SIZE (MM/INS)		200/10	250/12
PROTECT TYPE		PTC	PTC
FINISH		CARPET	CARPET
COLOUR		BLACK	BLACK
GRILLE		BLACK FULL	BLACK FULL
STAND ADAPTOR		YES	YES
CONNECTORS IN (POWER INPUT FROM AMPLIFIER)		2 X ¼" JACKS	2 X ¼" JACKS

DM1.0 MICROPHONE SPECIFICATIONS

TYPE:	DYNAMIC
FREQUENCY RESPONSE:	50Hz to 18kHz
POLAR P ATTERN:	CARDIOID
OUTPUT IMPEDANCE:	600 OHMS
OUTPUT LEVEL:	-72dB (0.16mV) 0dB=1V @ 1mBar
CONNECTOR:	3- PIN GOLD PLATED BALANCED XLR MALE
WEIGHT:	258g
ON/OFF SWITCH:	YES

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